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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/084,824	02/26/2002	Jay S. Dweck	G08.012	5662
28062	7590	11/03/2005	EXAMINER	
BUCKLEY, MASCHOFF, TALWALKAR LLC			GODDARD, BRIAN D	
5 ELM STREET			ART UNIT	
NEW CANAAN, CT 06840			PAPER NUMBER	

2161

DATE MAILED: 11/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/084,824

Applicant(s)

DWECK ET AL.

Examiner

Brian Goddard

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 August 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5, 8-26 and 28-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 8-26 and 28-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 18 August 2005 has been entered.
2. Claims 1-5, 8-26 and 28-31 are currently pending in this application. Claims 1, 28 and 31 are independent claims. In the Amendment filed with the RCE of 18 August 2005, claims 1, 13, 14, 17, 19, 21, 25, 28 and 31 were amended, and claim 27 was cancelled. This action is non-final.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 1-5, 8-23, 25, 26, and 28-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,336,094 issued to Ferguson et al. (hereafter Ferguson '094) in view of the publication, "Design and Implementation of an Access Control Processor for XML Documents," by Damiani et al., published by Computer

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Networks, June 2000 (hereafter Damiani '00), in further view of U.S. Patent No.

6,735,585 issued to Black et al. (hereafter Black '585).

Claim 1:

Regarding Claim 1, Ferguson '094 discloses: A method of facilitating access to documents (Ferguson '094: Abstract), comprising:

- receiving information associated with a financial document (Ferguson '094: col. 4, Ins. 24-28 – note the reception of information contained in an ASCII file);
- determining a document tag associated with the financial document based on the received information (Ferguson '094: col. 4, Ins. 28-48 – note the scanning for table headings); and
- automatically analyzing content of the financial document (Ferguson '094: col. 4, Ins. 28-48).

However, Ferguson '094 does not explicitly disclose:

- that the automatic analysis is to determine an appropriate entitlement rule;
- before a content selection tag associated with a requesting content reader is determined, evaluating the entitlement rule in connection with a plurality of content readers to generate an entitlement vector that indicates which of the content readers will be able to access information associated with the financial document;
- determining the content selection tag associated with the requesting content reader; and

- arranging for the requesting content reader to receive information associated with the financial document based on the entitlement vector and a bit vector representing at least one of: (i) the document tag and a plurality of tag sets, or (ii) a content selection tag and a plurality of document tags.

Damiani '00 discloses:

- that the automatic analysis is to determine an appropriate entitlement rule (Damiani '00: p. 5-9, Sections 3-4 and p. 11, Section 5.2, item labeled, "Tree Labeling." - Note that in this context, tree labeling reads on content selection of an XML document);
- before a content selection tag associated with a requesting content reader is determined (Damiani '00: p. 9, Section 4 – Note that the labeling process can be "obtained by means of a **preorder** visit on the documents DOM tree" [emphasis added] – preorder being before the document is ordered/requested), evaluating the entitlement rule (Damiani '00: p. 5-9, Sections 3-4 – Note that an XAS sheet for a DTD contains entitlement rules to be applied to the specific documents) in connection with a plurality of content readers to generate an entitlement vector that indicates which of the content readers will be able to access information associated with the financial document (Damiani '00: p. 5-9, Sections 3-4 – Note that an XAS sheet for a specific document is equivalent to the claimed "entitlement vector");
- determining the content selection tag associated with the requesting content reader (Damiani '00: p. 5-9, Sections 3-4 – Note that if preorder labeling has

occurred, as above, the remainder of the labeling process occurring post-order only requires a pruning step [See final paragraph of Section 4]; and p. 11, Section 5.2, item labeled, "Tree Labeling." - Note that in this context, tree labeling reads on content selection of an XML document).

- arranging for the requesting content reader to receive information associated with the financial document based on the entitlement vector (Damiani '00: p. 11, Section 5.2, item labeled "Tree Labeling." - Note that the sending final resulting pruned XML document (Damiani '00: p. 11, Section 5.2, last two lines, Ins. 38-39) reads on arranging for the requesting content reader content reader to receive information based on the transformation).

However, Damiani '00 does not explicitly disclose:

- based on the automatically determined entitlement vector and a bit vector representing at least one of: (i) the document tag and a plurality of tag sets, or (ii) a content selection tag and a plurality of document tags.

Black '585 disclose the use of bit vectors in combination of tag sets and attributes (col. 6, Ins. 53-58).

It would have been obvious to a person having ordinary skill in the art to apply the access control of Damiani '00 to the financial documents of Ferguson '094. The motivation to combine is suggested by Damiani '00 which discloses that application of the XAS infrastructure of Damiani '00 provides a particularly "simple and effective way" (Damiani '00: Abstract) to provide access control to documents, such as that of the potentially sensitive financial documents of Ferguson '094. Examiner notes that

Damiani '00 by itself discloses an XML parser, but in combination with Ferguson '094 includes a direct financial content parser. Thus determinations are made directly from the financial content.

It would have been further obvious to a person having ordinary skill in the art to apply the bit vector of Black '585 to the Ferguson '094 and Damiani '00 combination. The motivation to combine is suggested by Black '585 which discloses: an enhanced search mechanism to quickly extract financial data, such as the financial document of the Ferguson '094 and Damiani '00 combination (Black '585: col. 2, Ins. 7-28).

Claims 2-4, 8, 13-21, and 25:

Regarding Claims 2-4, 8, 13-21, and 25, Ferguson '094, Damiani '00, and Black '585 in combination disclose all the limitations of Claim 1 (supra). Additionally, Ferguson '094, Damiani '00, and Black '585 in combination disclose:

- (Claim 2) wherein the entitlement rule includes: an entitlement subject associated with a group of content readers (Damiani '00: p. 8, Section 3.2 titled, "Identifying Authorization Subjects" – Note that authorization subjects reads on content readers, and furthermore groupings, e.g. wild cards, and public, read on a group of content readers.)
- (Claim 3) wherein the entitlement rule includes an entitlement resource associated with at least one financial document (Damiani '00, pp. 8-9, Section 4 titled, "Authorization Enforcement" – Note that the authorization rules of Damiani '00 address document level and sub-document level access control, which reads on an entitlement resource associated with a document.)

- (Claim 4) wherein the entitlement rule includes an entitlement subject associated with a group of content readers (Damiani '00: p. 8, Section 3.2 titled, "Identifying Authorization Subjects"; an entitlement resource associated with at least one financial document (Damiani '00, pp. 8-9, Section 4 titled, "Authorization Enforcement"); and an entitlement action associated with the entitlement subject and the entitlement resource (Damiani '00: p. 10, Ins. 7-11; p. 11, Section 5.2 titled, "Execution Phases").
- (Claim 8) wherein the entitlement rule is associated with at least one entitlement tag (Damiani '00: p. 16, note the examples of the entitlement policies set at both the organization and department levels; further note that entitlement rules are associated with at least one tag).
- (Claim 13) wherein said arranging comprises transmitting an indication of the financial document to the requesting content reader (Damiani '00: p. 17, Section 7, note item titled, "Document View").
- (Claim 14) wherein said arranging comprises transmitting the financial document to the requesting content reader (Damiani '00: p. 17, Section 7, note item titled, "Document View").
- (Claim 15) wherein the document tag is determined by retrieving information from a database (Damiani '00, p. 2, Ins. 24-42; p. 3, Fig. 1 – note the DTD data stores read on a database).
- (Claim 16) wherein the document tag is determined by receiving information from a content publisher, via a graphical user interface (Damiani '00: p. 17, Fig. 8; p.

17, Section 7, note item titled, "Document View" – note Fig. 8 is illustrating a GUI based web browser that is rendering the XML tags.)

- (Claim 17). The method of claim 1, wherein the document tag comprises at least one of (i) a primary tag, and (ii) a secondary tag (Damiani '00: p. 15, Fig. 7 – note the example XML document which illustrates document tags comprising at least one of a primary tag and a secondary tag).
- (Claim 18) wherein the content selection tag is determined by retrieving information from a database (Damiani '00, p. 2, Ins. 24-42; p. 3, Fig. 1 – note the DTD data stores read on a database).
- (Claim 19) wherein content selection tag is determined by receiving information from the requesting content reader via a graphical user interface (Damiani '00: p. 17, Fig. 8; p. 17, Section 7, note item titled, "Document View" – note Fig. 8 is illustrating a GUI based web browser that is rendering the XML tags.)
- (Claim 20) wherein said arranging is further based on a content reader tag (Damiani '00: p. 16, note example Department Policy, item 10 refers to "Bob" thus demonstrating a specific content reader tag).
- (Claim 21) wherein the financial document comprises content to be provided to a requesting content reader device via a communication network (Damiani '00: Abstract – note the platform of the XAS processing includes communication networks.)

- (Claim 25) further comprising transmitting the financial document to the requesting content reader (Damiani '00: p. 17, Fig. 8; p. 17, Section 7, note item titled, "Document View").

Claim 5:

Regarding Claim 5, Ferguson '094, Damiani '00, and Black '585 in combination disclose all the limitations of Claim 4 (supra). Additionally, Ferguson '094, Damiani '00, and Black '585 in combination disclose: wherein the entitlement action enables a content reader to perform at least one of the following actions:

- (i) receive an indication of a document,
- (ii) receive a document,
- (iii) modify a document, and
- (iv) delete a document (Damiani '00: p. 8, Ins. 33-35).

Claims 9 and 12:

Regarding Claims 9 and 12, Ferguson '094, Damiani '00, and Black '585 in combination disclose all the limitations of Claim 8 (supra). Additionally, Ferguson '094, Damiani '00, and Black '585 in combination disclose:

- (Claim 9) wherein the entitlement tag is associated with at least one entitlement tag domain (Damiani '00: p. 16, note example policies, both of which illustrate setting entitlements specific to a DTD; furthermore, DTDs read on entitlement tag domains).
- (Claim 12) wherein the entitlement tag is associated with at least one of (i) a content reader category, (ii) a content reader region; or (iii) a financial document

category (Damiani '00: p. 16, note both example policies refer to groups which reads on content reader categories).

Claims 10-11:

Regarding Claims 10-11, Ferguson '094, Damiani '00, and Black '585 in combination disclose all the limitations of Claim 9 (supra). Additionally, Ferguson '094, Damiani '00, and Black '585 in combination disclose:

- (Claim 10) wherein the entitlement tag domain comprises a single-rooted, hierarchical data structure (Damiani '00: p. 15, note example XML document based on a DTD; p. 16, note example policies, both of which illustrate setting entitlements specific to a DTD; furthermore, note that DTDs are single-rooted, hierarchical data structures).
- (Claim 11) wherein the entitlement tag domain comprises a multilevel domain, and at least one domain level comprises a plurality of entitlement tags (Damiani '00: p. 15, note example XML document based on a DTD; p. 16, note example policies – note the application of a plurality of entitlement tags applies to the multilevel XML document).

Claims 22-23:

Regarding Claims 22-23, Ferguson '094, Damiani '00, and Black '585 in combination disclose all the limitations of Claim 21 (supra). Additionally, Ferguson '094, Damiani '00, and Black '585 in combination disclose:

- (Claim 22) wherein the communication network comprises at least one of:
 - (i) the Internet,

- (ii) an intranet,
 - (iii) a public network,
 - (iv) a public switched telephone network,
 - (v) a proprietary network,
 - (vi) a wireless network, or
 - (vii) a local area network (Damiani '00: Abstract – note the platform of the XAS processing includes the Internet and intranets).
- (Claim 23) wherein the document comprises at least one of
- (i) text content,
 - (ii) image content,
 - (iii) audio content, or
 - (iv) executable content (Damiani '00: p. 15, Fig. 7 – note the example document has text content).

Claim 26:

Regarding Claim 26, Ferguson '094, Damiani '00, and Black '585 in combination disclose all the limitations of Claim 25 (supra). Additionally, Ferguson '094, Damiani '00, and Black '585 in combination disclose: wherein said transmitting is performed via at least one of

- (i) a content controller,
- (ii) a content publisher,
- (iii) a content reader,
- (iv) a personal computer,

- (v) a server,
- (vi) a portable computing device,
- (vii) a wireless telephone,
- (viii) a Web site, and
- (ix) an electronic mail message (Damiani '00: p. 3, Fig. 1 – note Damiani '00 is supported on web sites).

Claim 28:

Regarding Claim 28, the combination of Ferguson '094, Damiani '00 and Black '585 as applied to claim 1 above discloses: an apparatus (Ferguson '094: Abstract), comprising:

- a processor (Ferguson '094: Title, Abstract – note that Ferguson '094 is directed towards “electronically recognizing and parsing” which requires a processor);
and
- a storage device in communication with said processor and storing instructions adapted to be executed by said processor (Ferguson '094: Title, Abstract – note that Ferguson '094 is directed towards “electronically recognizing and parsing” which requires a storage device storing instructions and sending to a processor) to...perform the method of claim 1 as above.

Claims 29-30:

Regarding Claims 29-30, Ferguson '094, Damiani '00, and Black '585 disclose all the limitations of Claim 28 (supra). Additionally, Ferguson '094, Damiani '00, and Black '585 disclose:

- (Claim 29) wherein said storage device further stores at least one of:
 - (i) a document database,
 - (ii) a content reader database,
 - (iii) an entitlement rule database, or
 - (iv) an output database (Damiani '00, p. 2, Ins. 24-42; p. 3, Fig. 1 – note the DTD data stores read on a database).
- (Claim 30) further comprising: a communication device coupled to said processor and adapted to communicate with at least one of:
 - (i) a content publishing device,
 - (ii) a document storage device,
 - (iii) a content controller,
 - (iv) a content reader device, or
 - (v) a payment device (Damiani '00: p. 17; Fig. 8; p. 17, Section 7, note item titled, "Document View" – note Fig. 8 is illustrating a GUI based web browser that is rendering the XML tags; a web browser reads on a content reader device).

Claim 31:

Regarding Claim 31, the combination of Ferguson '094, Damiani '00 and Black '585 as applied to claim 1 above discloses: a medium storing instructions adapted to be executed by a processor (Ferguson '094: Title, Abstract – note that Ferguson '094 is directed towards "electronically recognizing and parsing" which requires a storage device storing instructions and sending to a processor), said method comprising...the method of claim 1 above.

4. Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ferguson '094, Damiani '00, and Black '585 in combination in view of the publication, "RIXML Specification User's Guide and Data Dictionary Report," published by RIXML, June 20, 2001 (hereafter RIXML '01).

Claim 24:

Regarding Claim 24, Ferguson '094, Damiani '00, and Black '585 in combination disclose all the limitations of Claim 21 (supra). However, Ferguson '094, Damiani '00, and Black '585 in combination disclose does not explicitly disclose, wherein the content comprises at least one of

- (i) financial information,
- (ii) financial news,
- (iii) information about financial events,
- (iv) investment information, or
- (v) market information.

RIXML '01 discloses one of many financial information XML schemas used to provide structured data regarding investment research. Specifically, RIXML '01 discloses: wherein the content comprises at least one of

- (i) financial information,
- (ii) financial news,
- (iii) information about financial events,
- (iv) investment information, or

(v) market information (RIXML '01: p. 5, Section titled, "Overview"; p. 6, Item titled, "RIXML Schema" – note that among other things, RIXML supports investment information.)

It would have been obvious to a person having ordinary skill in the art to apply the financial data of RIXML '01 to the XAS infrastructure of Ferguson '094, Damiani '00, and Black '585 in combination. The motivation to combine is suggested by Damiani '00 which discloses that application of the XAS infrastructure of Damiani '00 provides a particularly "simple and effective way" (Damiani '00: Abstract) to provide access control to XML documents, such as that of RIXML '01.

Response to Arguments

5. Applicants' arguments with respect to claims 1-5, 8-26 and 28-31 have been considered but are moot in view of the new ground(s) of rejection.

Referring to applicants' remarks on pages 9-10 regarding the Section 103 rejection of claim 1: Applicants argued that the combination of references does not teach or suggest "before a content selection tag associated with a requesting content reader is determined, evaluating the entitlement rule in connection with a plurality of content readers to generate an entitlement vector that indicates which of the content readers will be able to access information associated with the financial document" as claimed.

The examiner disagrees for the following reasons: In the context of the combination, Damiani '00 does teach the claimed generation of an entitlement vector.

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As specified in the new grounds of rejection above, Damiani teaches that preorder labeling can occur (i.e. "before a content selection tag associated with a requesting content reader is determined") in Section 4 on page 9. Specifically, when an XAS is specified for a particular DTD, preorder labeling can occur to create an individual XAS for each individual document specified by that DTD, according to the entitlement rules of the XAS for the DTD. This document-specific XAS is equivalent to the claimed "entitlement vector." It is generated pre-order, so that when an individual requesting content reader orders the document, only the pruning step is necessary (rather than the entire labeling process) to enforce the authorizations applicable to that reader.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian Goddard whose telephone number is 571-272-4020. The examiner can normally be reached on M-F, 9 AM - 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Safet Metjahic can be reached on 571-272-4023. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

bdg
28 October 2005



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